US Department of Transportation Intelligent Transportation Systems Next Generation 9-1-1 Initiative: Historical Overview

Introduction

The National Highway Traffic Safety Administration (NHTSA), under the U.S. Department of Transportation, was established by the Highway Safety Act of 1970, as the successor to the National Highway Safety Bureau, to carry out safety programs under the National Traffic and Motor Vehicle Safety Act of 1966 and the Highway Safety Act of 1966. The NHTSA Emergency Medical Services (EMS) mission is to support comprehensive EMS system development and improvement, and to serve as the lead Federal coordinating agency for technical and policy expertise on EMS systems and 9-1-1.

Emergency Medical Services

The Highway Safety Act of 1966 recognized the importance of EMS in reducing traffic mortality and morbidity and directed NHTSA to develop Highway Safety Standard 11 for EMS. This standard stimulated improvement of EMS equipment and personnel throughout the nation and initiated the modern era of national EMS system development. Most recently, the "Safe, Accountable, Flexible, Efficient Transportation Act: A Legacy for Users" (SAFETEA-LU) authorized the creation of a Federal Interagency Committee on Emergency Medical Services (FICEMS) to improve Federal EMS coordination and assigned NHTSA primary responsibility for providing administrative support.

Among its many activities over the past four decades, NHTSA created guidelines for EMS system development, national standard education curricula for EMTs and paramedics, model state EMS legislation, the National EMS Agenda for the Future and developed the Star of Life – the symbol for emergency medical services. NHTSA's current major EMS focus areas include pre-hospital EMS education, national EMS data collection, EMS workforce development and Wireless Enhanced 9-1-1.

9-1-1

For many years, NHTSA has promoted and supported the use of 9-1-1 as the nation's official emergency access telephone number. This is evident in a number of NHTSA products and programs, including, the State EMS Assessments program, the 1996 EMS Agenda for the Future, and other documents. The 9-1-1 network is a vital part of our nation's day-to-day emergency response and disaster preparedness system. While approximately 96% of the geographic U.S. is covered by some type of 9-1-1 service, there are challenges in making necessary upgrades to the 9-1-1 system to meet evolving public needs and keep up with advancing technology.

The original 9-1-1 network is based on outmoded analog technology and landline transmission. PSAPs, like many local- or state-funded services, lack resources to upgrade their equipment and training to utilize existing technology. For example, it is estimated that less than half of the nation's PSAPs are able to receive automatic telephone number and location information for 9-1-1 calls made from a cellular/wireless phones.

The ENHANCE 911 Act of 2004 authorizes NHTSA and the National Telecommunications and Information Administration to establish a national 9-1-1 Implementation Coordination Office (ICO) and to administer a grant program for PSAPs.

The DOT, through the Secretary's Wireless Initiative, developed a Priority Action Plan, created technical assistance products for PSAPs, and conducted a technology innovation roundtable that fostered the creation of the Next Generation 9-1-1 (N9-1-1) Initiative. The 9-1-1 Initiative, funded by the Intelligent Transportation Systems Joint Program Office, will facilitate the research, design and demonstration of the 9-1-1 system of the future including a system architecture and migration plan. It seeks to enable 9-1-1 access via multiple communication devices, and allow public safety agencies to share voice, data, and video/photograph information.

- NG9-1-1...It's Not Just Telephones Anymore -